

XIV.—*Postscript to the Memoir on the Depression of the Wet-bulb Thermometer, published in the July number. By JAS. PRINSEP, Sec. &c.*

I have only found leisure to repeat the experiments forming the final section of my former paper, on one more of the simple gases, namely oxygen; of which the specific heat, calculated from the data thus supplied, has not been found to differ materially from that of common atmospherical air. It follows necessarily, that azote must have the same specific heat, since the mixture of the two causes no alteration in the observed depression. The experiments were conducted in the same order as before, except that the glass exit tube was somewhat narrower, and the dry thermometer was fixed in it half an inch below the wetted bulb. Some trials, with common air, were first made to ascertain whether this arrangement produced any material difference of result.

		<i>Depressions with Oxygen gas.</i>					Max. dep.	Tabular
		Bar.	<i>t</i>	<i>t'</i>	<i>d</i>	<i>h</i>	for hyg. $\sigma$	max. dep.
			$\circ$	$\circ$	$\circ$			
Sept.	21 Common air,	29.65	92.0	55.0	36.8	6 ?	39.0	37.2
Oct.	2 Ditto,	29.78	83.8	51.6	32.4	0	32.4	32.7
	4 Ditto,	29.75	89.5	54.3	35.2	0	35.2	35.7
	11 Oxygen,	29.81	82.0	51.4	30.6	2	31.2	31.8
	21 Ditto,	30.00	81.2	53.4	27.8	2 ?	28.3	31.4
Nov.	3 Ditto,	29.90	82.8	52.1	30.7	0	30.7	32.1
	5 Ditto,	29.88	83.4	52.2	31.2	0	31.2	32.5

In the first experiment it is evident, that the hair hygrometer had not reached its full contraction for the actual siccidity of the air enclosed in the gasometer. The trifling inferiority in the depressions for oxygen, I am inclined to attribute to the more sparing hand with which it was expended:—the difference of four per cent. is certainly larger than ought to be conceded to experimental error, but I feel sure that a more careful and longer series would have brought out a nearer approach to the depressions observed in common air.

XV.—*Proceedings of the Asiatic Society.*

*Wednesday Evening, the 4th January, 1837.*

The Honorable Sir EDWARD RYAN, President, in the chair.

Messrs. W. DENT and M. MANUK, proposed at the last meeting, were ballotted for, and duly elected Members of the Society.

Captain EDWARD SANDERS was proposed by Major TAYLOR, seconded by Mr. W. H. MACNAGHTEN.